

## REMARKS

This is in response to the 18-Jun-2010 Final office action.

The amendment filed 10/27/2006 was objected to under 35 USC 132(a) on the alleged grounds that it introduced new matter into the disclosure. The added material was in the form of the omission of NILSET<sup>TM</sup> 117, HAPCO<sup>TM</sup> NXZ and BORCHI® GOL E2 from claim 1. In the present amendment, NILSET<sup>TM</sup> 117, NOPCO<sup>TM</sup> NXZ and BORCHI® GOL E2 are being added back to claim 1. Therefore, this objection should be withdrawn.

The amendment filed 10/15/2009 was objected to under 35 USC 132(a) on the alleged grounds that it introduced new matter into the disclosure. The added material was in the form of changing HAPCO<sup>TM</sup> NXZ to NOPCO<sup>TM</sup> NXZ. A Rule 132 Declaration of co-inventor DR. K.V.S.N Raju is being concurrently submitted. As stated in the Declaration at ¶ 12, one skilled in the art, upon reading the examples, would readily recognize, that the present inventors meant “NOPCO<sup>TM</sup> NXZ” and not HAPCO<sup>TM</sup> “NXZ”, especially in view of the examples provided. As stated in the Declaration at ¶ 13, NOPCO<sup>TM</sup> NXZ is even mentioned in a number of US patents, a number of which mention its anti-foaming properties.

Claims 1-2 and 4 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. In particular, the Examiner objected to these claims on grounds that the disclosure, as originally filed, did not provide support for, e.g., claim 1 reciting a coating composition that did not include NILSET<sup>TM</sup> 117, NOPCO<sup>TM</sup> NXZ and BORCHI® GOL E2. In the present amendment, NILSET<sup>TM</sup> 117, NOPCO<sup>TM</sup> NXZ and BORCHI® GOL E2 are being added back to claim 1. In addition, the Rule 132 Declaration attests to each of these compounds as being known to those skilled in the art, at the time the present application was filed. Declaration at ¶¶ 9-11, 13. Therefore, this rejection is believed to have been overcome.

Claims 21-26 was rejected under 35 USC 103(a) as being unpatentable over Wu (USP 3,997,694) or Wu (USP 3,943,187), in view of Shanton (USP 5,776,619) and in view of WO 99/23179).

Claims 22-25 were rejected under 35 USC 103(a) as being unpatentable over Wu (USP 3,997,694) or Wu (USP 3,943,187), in view of Shanton (USP 5,776,619) and WO 99/23179), as applied to claim 21, and further in view of Christenson et al (USP 4,335,829).

Claims 1-2, 4 and 21-26, as amended, are being submitted for the Examiner's consideration.

#### Amendments to the Claims

The preamble of the independent claims has been amended to recite that the claimed composition is a "food grade packaging coating material capable of providing an oxygen barrier when applied to a packaging substrate." Support for this language can be found in the title of the invention the abstract ("A coating composition for packaging material") and throughout the specification.

It is submitted that the cited prior art does not disclose a food grade packaging coating material comprising the recited compounds.

#### Rejection of Independent Claim 21

The Examiner's rejection is traversed. First, none of the references discloses a food-grade packaging coating material capable of serving as an oxygen barrier when applied to a packaging substrate. See Declaration at ¶ 5. Furthermore, it is submitted that one skilled in the art would not be motivated to combine the cited references as suggested by the Examiner.

The Wu references are directed to a ductile, formable coating for aluminum and steel cans. The coating contains epoxy resin and well as an acrylic polymer. These references make no mention of the suitability of this resulting material as a food grade packaging coating capable of providing an oxygen barrier. See Declaration at ¶ 6. Further, as noted by the Examiner, the Wu references do not disclose calcined clay at all.

Shanton '619 is directed to an improved paperboard or plate stock useful for food containers such as plates, bowls, trays etc. Shanton mentions the use of food grade pigments for coloration, and mention that calcined clay is one such pigment. However, Shanton evidently does not appreciate the oxygen barrier property of using calcined clay in combination with an alkyd or epoxy resin, TiO<sub>2</sub>, and Talc, in the amounts recited in pending claim 21. See Declaration at ¶ 7.

WO 99/23179 is directed to a coating composition for paperboard, and employs latex and various colorants and also extenders/fillers like calcined kaolin, precipitated silicas, synthetic and precipitated calcium carbonate, calcined clay, etc. As noted by the Examiner, these materials are used as fillers to reduce the cost. However, WO 99/23179 does not appreciate the oxygen barrier property of using calcined clay in combination with an alkyd or epoxy resin, TiO<sub>2</sub>, and Talc, in the amounts recited in pending claim 21. See Declaration at ¶ 8.

On page 5 of the office action, the Examiner argues that it would have been obvious to (a) use Wu's coating to form a "durable protective film for food containers"; and (b) add calcined clay to Wu's coating. This is pure hindsight. It is submitted that nothing in the Shanton or the WO 99/23179 paperboard references would inspire one skilled in the art to employ calcined clay (mentioned as being one of many pigments in one reference, and mentioned as a filler in another) in Wu's composition for coating metal cans. And even if one were to do this, one still would not arrive at the invention of

claims 21, with its claimed weight amounts of alkyd or epoxy resin, TiO<sub>2</sub>, Talc and calcined clay.

Rejection of Claims 22-26

Christenson, discloses, among other things, the use of acrylamide and epoxy resin in coating formulations for coating the interior coating of metal beer cans. Christenson also discloses the use of various additives. However, it is submitted that one skilled in the art, given the problem of providing an oxygen barrier for packaging, would not turn to Christenson in the first place, since Christenson is directed to coatings for a metal container.

Reconsideration of the application is requested. Claims 1, 2, 4, and 21-26 are believed to be in allowable form and define over the prior art of record. An early notice of allowance is therefore requested so that the application may proceed to issue.

If any fee is required, including extension of time fees and claims amendment fees, the Director is authorized to charge any such fee to Womble Carlyle's Deposit Account No. 09-0528.

Respectfully Submitted,

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